

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 9 and 50 as set forth below.

Listing of Claims

1. (Currently Amended) A wireless sensor probe comprising:
a probe body for placement into the ground; said probe body having an interior and an exterior;
a sensor member including one or more sensor devices for sensing a soil property surrounding the probe body when the probe body is inserted into the ground;
and
a top member selectively removable from a top of said probe body;
wherein the sensor member is configured to removably fit within the interior of the probe body; and
wherein the interior of the probe body is selectively enclosable with the top member; and
wherein the wireless sensor probe is further configured to wirelessly transmit data from the one or more sensor devices.
2. (Canceled)
3. (Previously Presented) The wireless sensor probe of claim 1, further comprising a gasket.
4. (Canceled)
5. (Previously Presented). The wireless sensor probe of claim 1, wherein the sensor member further comprises a gasket disposed on the sensor member.

6. (Previously Presented) The wireless sensor probe of claim 1, further comprising: a collar situated near a top portion of the probe body.
7. (Previously Presented) The wireless sensor probe of claim 1, wherein the sensor member further comprises a battery.
8. (Previously Presented) The wireless sensor probe of claim 1, wherein the top member comprises a transceiver circuit.
9. (Currently Amended) The wireless sensor probe of claim 1, wherein the probe top member part connects to the probe body by an arrangement selected from the following: a screw mount, a bayonet type mount and a flange mount.
10. (Previously Presented) The wireless sensor probe of claim 1, wherein the top member comprises a solar cell panel.
11. (Previously Presented) The wireless sensor probe of claim 1, wherein the top member comprises a data display.
12. (Original) The wireless sensor probe of claim 11, wherein the data display comprises one of an LED display or an LCD display.
13. (Previously Presented) The wireless sensor probe of claim 1, wherein a shape of the probe body is selected from a round shape, a hexagon shape, a rectangular shape, a triangular shape, and or a cross-beam shape.
14. (Previously Presented) The wireless sensor probe of claim 1, wherein the probe body further comprises one or more raised structures protruding out of the probe body.

15. (Withdrawn) A wireless sensor probe comprising: a housing containing one or more sensor devices, the housing to be inserted partially into the ground for sensing a soil property surrounding the housing; and a collar situated near a top portion of the housing, the collar being used to anchor the housing to the top of the ground when the housing is inserted into the ground.

16. (Withdrawn) A wireless sensor probe comprising: a housing containing one or more sensor devices, the housing to be inserted partially into the ground for sensing a soil property surrounding the housing; and a gasket formed on the outside perimeter of the housing for securing the housing in the ground when the housing is inserted into the ground.

17. (Withdrawn) The wireless sensor probe of claim 15, wherein the gasket comprises an angular structure surrounding the outside perimeter of the housing, the angular structure having a top portion facing the top of the housing, a bottom portion facing the bottom of the housing and a side portion having tapered width where the width decreases from the top portion to the bottom portion.

18. (Withdrawn) The wireless sensor probe of claim 15, wherein the housing further comprises a battery slot and a PC board for accommodating a processor.

19. (Withdrawn) The wireless sensor probe of claim 15, wherein the housing comprises a top portion for housing a transceiver circuit, the top portion remaining above the ground when the housing is inserted into the ground.

20. (Withdrawn) The wireless sensor probe of claim 15, wherein the housing comprises a top portion for housing a solar cell panel.

21. (Withdrawn) The wireless sensor probe of claim 15, wherein the housing is configured in a round shape, a hexagon shape, a rectangular shape, a triangular shape, or a cross-beam shape.

22. (Withdrawn) The wireless sensor probe of claim 15, wherein the housing further comprises one or more raised structures protruding out of the housing for containing the sensor device.

23-47. (Canceled)

48. (Previously Presented) The wireless sensor probe of claim 1, wherein the sensor member is a sensor mast.

49. (Previously Presented) The wireless sensor probe of claim 1, wherein the sensor member further comprises sensor components selected from the following group: an air temperature sensor, a relative humidity sensor, a light level sensor, a soil moisture sensor, a soil temperature sensor, a soil dissolved oxygen sensor, a soil pH sensor, a soil conductivity sensor, and a soil dielectric frequency response sensor.

50. (Currently Amended) A wireless soil sensor having selectively joinable components, the wireless soil sensor comprising:

a probe body having an opening into an interior of the probe body;

a component mast comprising sensor circuitry; said component mast being user-insertable into the opening into the interior of the probe body; and,

a probe top selectively engagable with the probe body so as to cover the opening into the interior of the probe body;

wherein the wireless soil sensor is further configured to wirelessly transmit data from the sensor circuitry.

51. (Previously Presented) The wireless soil sensor of claim 50, wherein the component mast connects to the probe top.

52. (Previously Presented) The wireless soil sensor of claim 50 further comprising a plurality of sensor components.

53. (Previously Presented) The wireless soil sensor of claim 52, wherein at least a portion of the plurality of sensor components are positioned along a length of the probe body.

54. (Previously Presented) The wireless soil sensor of claim 52, wherein at least a portion of the plurality of sensor components are positioned around a perimeter of the probe body at a first location.

55. (Previously Presented) The wireless soil sensor of claim 50, wherein the sensor circuitry further comprises sensor components selected from the following group: an air temperature sensor, a relative humidity sensor, a light level sensor, a soil moisture sensor, a soil temperature sensor, a soil dissolved oxygen sensor, a soil pH sensor, a soil conductivity sensor, and a soil dielectric frequency response sensor.

56. (Previously Presented) The wireless soil sensor of claim 50, wherein the probe top connects to the probe body by an arrangement selected from the following: a screw mount, a bayonet type mount and a flange mount.

57. (Previously Presented) The wireless soil sensor of claim 50, wherein said component mast further comprises a battery.

58. (Previously Presented) The wireless soil sensor of claim 50, wherein said top part further comprises a display.

59. (Previously Presented) The wireless soil sensor of claim 50, wherein said top part further comprises a solar cell.